

Appl. No. 10/087,142 (Docket 093/005)  
Amdt. dated Nov. 15, 2005  
Reply to Office Action of March 28, 2005

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

What is claimed as the invention is:

1. – 12. (*Canceled*)

13. (*Currently amended*) A method for obtaining ~~the~~ hepatocyte lineage cells ~~cell population of~~  
~~claim 1,~~ comprising culturing the pPS cells in a growth environment that comprises one or  
more hepatocyte maturation factors that are either:

a) an organic solvent selected from dimethyl sulfoxide (DMSO), dimethylacetamide  
(DMA); hexmethylene bisacetamide, and other polymethylene bisacetamides; or

b) a cytokine or hormone selected from glucocorticoids, epidermal growth factor  
(EGF), insulin, TGF- $\alpha$ , TGF- $\beta$ , fibroblast growth factor (FGF), hepatocyte growth factor  
(HGF), IL-1, IL-6, IGF-I, IGF-II, and HBGF-1.

14. – 20. (*Canceled*)

21. (*New*) The method of claim 13, wherein the growth environment comprises DMSO.

22. (*New*) The method of claim 13, wherein the growth environment comprises a cytokine.

23. (*New*) The method of claim 13, wherein the growth environment comprises HGF.

24. (*New*) The method of claim 13, wherein the growth environment comprises insulin.

25. (*New*) The method of claim 13, wherein the growth environment comprises FGF.

26. (*New*) The method of claim 13, wherein the growth environment comprises  
dimethylacetamide.

27. (*New*) The method of claim 13, wherein the growth environment comprises hexmethylene  
bisacetamide.

28. (*New*) The method of claim 13, wherein the growth environment comprises EGF.